

REMARKS

The last Office Action has been carefully considered.

It is noted that claim 12 is rejected under 35 U.S.C. 103(a) over the patent to Yoshida.

Claims 1, 6, 7, and 11 are rejected under 35 U.S.C. 103(a) over the patent to Yoshida in view of the patent to Toyama.

Also, claim 12 is rejected under 35 U.S.C. 112.

In connection with the Examiner's rejection of claim 12 under 35 U.S.C. 112 for formal reasons, applicant has amended this claim to remove the language which in the Examiner's opinion is not disclosed in the specification. As for the issue of the optical axes, it is respectfully submitted that each optical element 12, 26, 16 has its own optical axis. In the alignment procedure this axis has to be fitted in the three axes of translation and two axes of rotation. The alignment of the element 26 to the element 16 has to be done in six orientations caused by the multi beams from optical element 26 to the optoelectronic sensor element. The alignment and the

fixation of this element 26 to the optical sensor have to be done with an alignment accuracy of lower than 1 μm . This multi axes alignment in this accuracy range was not state of the art and can only be solved with the described invention. In connection with the Examiner's question it is therefore respectfully submitted that the axis in line 12 is a different axis than that described in lines 3 and 7.

It is believed that the Examiner's grounds for the rejection of claim 12 under 35 U.S.C. 112 should be considered as no longer tenable and should be withdrawn.

The Examiner's indication of the allowance of claim 10 has been gratefully acknowledged. In connection with this, claim 10 has been retained as it was.

After carefully considering the Examiner's grounds for the rejection of other claims, applicants have retained the claims as they were, with the exception of the above mentioned minor changes in claim 12.

It is respectfully submitted that claims 1 and 11 define an optoelectronic receiver which has new features provided in their interjunction

and interaction to form a new optoelectronic receiver which has a macroscopically conception with a needed accuracy in the region of 100 μ m. Claim 12 substantially corresponds to claim 1 and additionally defines that the optical axis 24 of the coupling element 26 extends perpendicular to the sensor 16, which is obtained with the use of the retaining device 24 formed as a plane-parallel plate with optical surface qualities satisfying high requirements. This claim also defines the specific inventive interjunction and interaction which imparts the above mentioned high accuracy.

It should be also mentioned again that the coupling element 26 is not as simple, single-axis optical lens, but instead is an optical coupling element with which a plurality of optical beams with high parallelism and phase frequency which are produced and focused to the optical sensor. The coupling element 26 produces a plurality of beams which are all vertical and must fall on the sensor without optical path differences. These beams which can be identified by the type of the beam source as gaussian beams fall directly on the surface of the sensor. By means of the retaining device 24 with the precision in the surface, the connection process can be used with a very low connection gap less than 5 m μ . The used connection process guarantees after the adjustment a minimal error orientation in the vertical optical axes of all optical beams.

In accordance with the present invention with the inventive evaluation of different signals of the sensor by the occurrence of the optical beams a horizontal orientation and an angular orientation in a horizontal plane is possible. This evaluation is suitable also for optical beams with a very small spot diameter less than 100 µm on the sensor with a very small sensor with correspondingly a very sensor less than 100 µm.

The Examiner rejected claim 12 as being obvious over the patent to Yoshida. The Examiner indicated that this reference discloses an optoelectronic receiver which have similar structural elements as the optoelectronic receiver of the applicant's invention. At the same time, the Examiner himself admitted that it does not teach other features of the present invention which are defined in claim 12. The Examiner also rejected the claims as being obvious over the combination of the patent to Yoshida In view of the patent to Toyama. Again, the Examiner indicated that some features are disclosed in one of the references, the other features are disclosed in the other reference. But still, there are some features which are not disclosed in any of the references.

It is again emphasized that the optoelectronic receiver which is now defined in the independent claims 1, 11 and 12 is designed so that

some of its features are of course known, while other features are not, so that as explained herein above, it has a macroscopic conception with the accuracy in the region of 100 µm. These advantages are not provided by the construction disclosed in the references and can not be accomplished by them, whether the references are taken singly or in combination with one another. It is not easy, near possible, or obvious to translate this concept into the inventive solution without additional elements and configurations.

As for the combination of the references proposed by the Examiner, it is respectfully submitted that this combination can not be considered as obvious. As was decided In re Fritch 23 USPQ 2d 1780, 1783-84 (Fed. Cir 1992).

"Obviousness can not be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestions supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification".

Definitely, there is no hint or suggestion in the reference to combine them in the manner suggested by the Examiner.

Also, the receiver disclosed in the references do not have all features of the present invention which are defined in the independent claims. In order to arrive at the applicant's invention, the references have to be fundamentally modified. However, it is known that in order to arrive at a claimed invention, by modifying the references the cited art must itself contain a suggestion for such a modification.

This principle has also been consistently upheld by the U.S. Court of Customs and Patent Appeals which, for example, held in its decision in re Randol and Redford (165 USPQ 586) that

Prior patents are references only for what they clearly disclose or suggestion; it is not a proper use of a patent as a reference to modify its structure to one which prior art references do not suggest.

Definitely, the references do not contain any hint or suggestion for such modifications.

Also, as explained herein above, the present invention provides for the highly advantageous results which can not be accomplished by the devices disclosed in the references. It is well known that in order to support a valid rejection the art must also suggest that it would accomplish applicant's results. This was stated by the Patent Office Board of Appeals,

In the case Ex parte Tanaka, Marushima and Takahashi (174 USPQ 38), as follows:

Claims are not rejected on the ground that it would be obvious to one of ordinary skill in the art to rewire prior art devices in order to accomplish applicants' result, since there is no suggestion in prior art that such a result could be accomplished by so modifying prior art devices.

In view of the above presented remarks and amendments, it is believed that claims 1, 11 and 12 should also be considered as patentably distinguishing over the art and should also be allowed.

Reconsideration and allowance of the present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,


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